



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,894	03/23/2004	Larry S. Eoff	2001-IP-005267U1P2	2392
7590		07/12/2007		
Robert A. Kent				
Halliburton Energy Services				
2600 South 2nd Street				
Duncan, OK 73536-0440				
			EXAMINER	
			FIGUEROA, JOHN J	
			ART UNIT	PAPER NUMBER
			1712	
			MAIL DATE	DELIVERY MODE
			07/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/806,894	EOFF ET AL.	
	Examiner	Art Unit	
	John J. Figueroa	1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) 7 and 11-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>April 16, 2007</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. Receipt is acknowledged of a request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e) and a submission (amendment), filed on May 4, 2007. The request has been deemed proper and this application has been hereby examined in view of said amendment.

Election/Restrictions

2. Claims 7 and 11-38 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim, in accordance with the Restriction Requirement in item 1 of the Office Action of July 3, 2006. This restriction was made final in the previous office action.

Response to RCE Amendment

3. The 35 U.S.C. §102 rejection of claims 1-6 and 8-10 as anticipated by PCT Application Publication Number WO 03/056130 A1 to Couillet et al., hereinafter 'Couillet', is maintained for the same reasons previously set forth in item 8 on page 4 of the Final Office Action of January 23, 2007 (FOA).

Art Unit: 1712

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-6 and 8-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Couillet for the same reasons previously made of record in item 17 on page 9 of OA.

Examiner further notes that the method of use of independent claim 1 has been amended to add an additional new step regarding “allowing the water-soluble relative permeability modifier to attach onto a surface of the subterranean formation.”

Couillet was discussed previously in item 17 on page 9 of the Office Action of July 3, 2007 and all the arguments and grounds of rejection therein are incorporated herein in their entirety.

Although Couillet may not explicitly disclose “allowing” the relative permeability modifier to “attach” onto the surface, because Couillet discloses treating a formation with the same relative permeability modifier (RPM) polymer compound as encompassed by the instant claims and thus possesses the same physical properties/effects, then the method disclosed in Couillet is must inherently allow the RPM polymer compound to

"attach" to a portion of the surface of the subterranean formation" upon the addition of said RPM polymer compound in the Couillet's method of treating/fracturing a formation.

Examiner notes that Couillet discloses chitin, chitosan and modified chitosan via acylation/alkylation with an alkyl halide as a polymer compound added to the formation. (See, instant claims 5 and 6 reciting chitosan and alkyl halide as the hydrophilic polymer and hydrophobic compound, respectively.) Consequently, Couillet is disclosing using in the method of treating a formation a RPM polymer compound as encompassed by the instant claims with "sufficient specificity".

Thus, the claims, as amended, remain unpatentable over Couillet.

Response to Arguments

The 35 U.S.C. §102 Rejection over Couillet (item 8 of FOA)

6. Applicant's arguments in Response with respect to the 35 U.S.C. 102(e) rejection of claims 1-6 and 8-10 as anticipated by Couillet have been fully considered but are deemed unpersuasive.

Applicant's arguments in Response regarding the newly added "allowing" step in independent claim 1 were addressed *supra* in paragraph #10. Because Couillet adds the same RPM polymer compound to a formation as encompassed by the method of the instant claims, then "at least a portion" of the permeability of the formation must inherently be "attaching" to the formation as disclosed in Couillet.

Thus, the instant claims remain anticipated by Couillet.

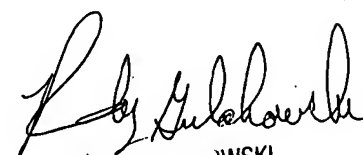
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Figueroa whose telephone number is (571) 272-8916. The examiner can normally be reached on Mon-Thurs & alt. Fri 8:00-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JJF/RAG


RANDY GULAKOWSKI
TENTATIVE PATENT EXAMINER
ELECTRONIC BUSINESS CENTER 1700